

## A Survey of Macrolepidopteran Moths of Turkey Run and Great Falls National Parks, Fairfax County, Virginia

Brent W. Steury

700 George Washington Memorial Parkway  
Turkey Run Park Headquarters  
McLean, Virginia 22101

John Glaser

116 Hickory Hollow Road  
Berkeley Springs, West Virginia 25411

Christopher S. Hobson

Virginia Department of Conservation and Recreation  
Division of Natural Heritage  
217 Governor Street  
Richmond, Virginia 23219

### ABSTRACT

National park sites at Turkey Run Park and Great Falls Park, Fairfax County, Virginia, were surveyed intermittently from April 1999 through March 2007 for macrolepidopteran moths. A total of 480 taxa from 281 genera in 13 families was documented, including the first known record of *Abrostola urentis* Guenée (Noctuidae) from Virginia. Eleven of the taxa recorded are included on the watch list of rare animals in Virginia. Relationships of uncommon moths to their host plants are discussed. Extensions to the known physiographic ranges and periods of adult flight activity are noted for some species.

*Key words:* *Abrostola urentis*, biodiversity, Lepidoptera, moths, national parks, Potomac River Gorge, Virginia.

### INTRODUCTION

Although the Lepidoptera have long been esteemed among collectors of insects (Morrison, 1875; Packard, 1895; Holland, 1903), few systematic studies of the moths of Virginia have been published (Skinner, 1921; Stein, 1993; Ludwig, 2000, 2001, 2002; Butler et al., 2001). Thus, there has been little dissemination of information on the distribution of macro-moth species within the Commonwealth. This study sought to add to the distributional knowledge of the macro-moth fauna by compiling individual records documented with a voucher specimen from two national park sites in northern Virginia, ascertain the species richness of macro-moths found along the Potomac River Gorge, an area long heralded for its biodiversity and regionally

rare species (Ward, 1881; Cohn, 2004), and determine whether any federally or state-listed rare, threatened or endangered macro-moths occur within the study sites.

### STUDY SITES

The study sites are located within the Virginia portions of Great Falls Park and in Turkey Run Park, Fairfax County, Virginia (Fig. 1). Both parks lie on the western rim of the Potomac River Gorge within the Piedmont physiographic province of the Central Appalachian region. Great Falls Park encompasses nearly 323 ha while the area studied in Turkey Run Park is approximately 100 ha. Turkey Run Park is 15 km northwest of the center of Washington, D.C. and Great Falls Park is 5 km farther upriver. The parks are

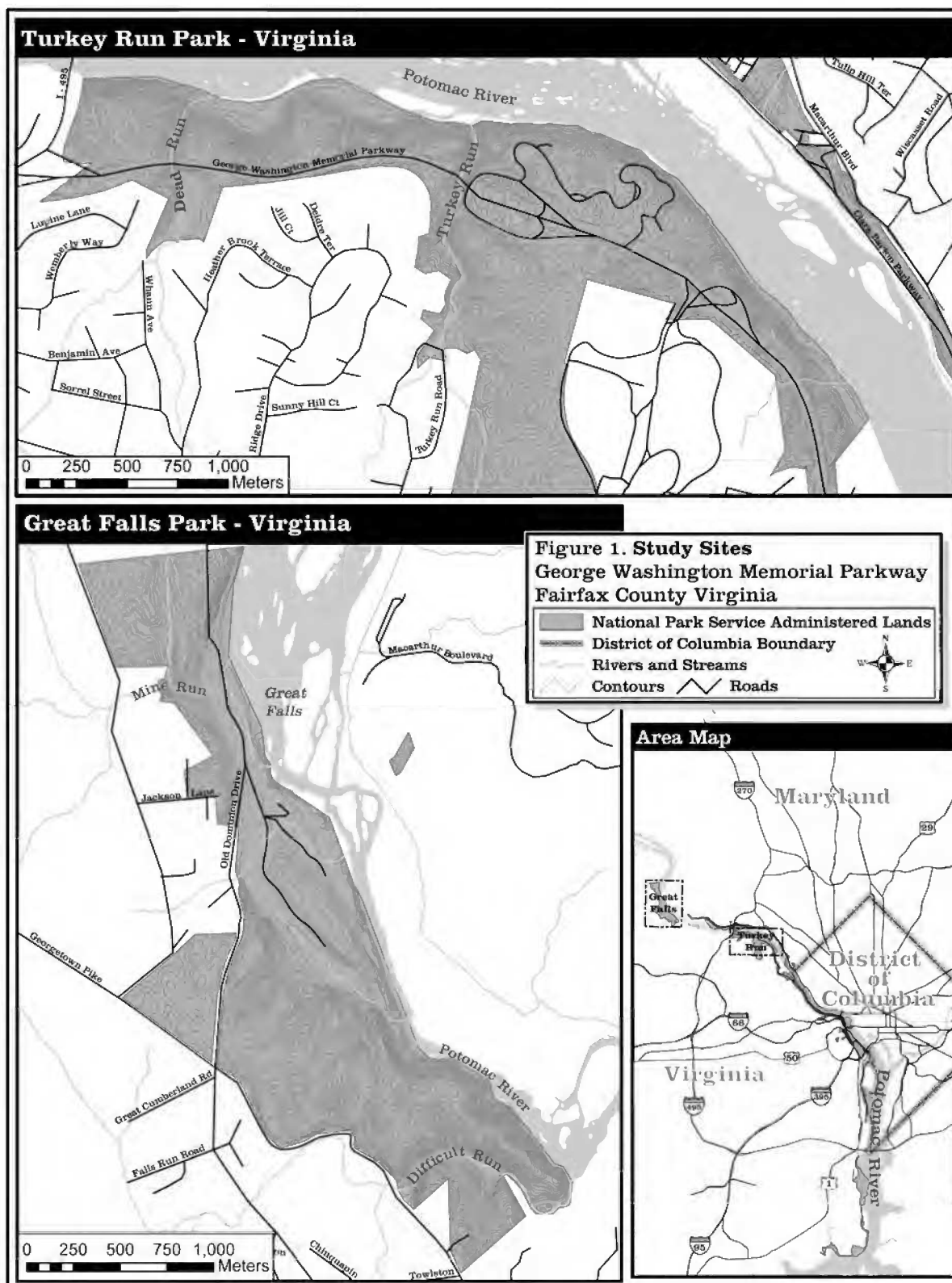


Fig. 1. Location and topographic features of Turkey Run and Great Falls national parks.

managed by the National Park Service as units of the George Washington Memorial Parkway.

Both parks are characterized by two-hundred foot palisades of metamorphic rock cut by steep streams draining into the Potomac River. The park's vegetation includes a complex of upland and floodplain forest communities, riverside bedrock terrace prairies, and frequently flooded river shores. Although disturbed, secondary forests are common in formerly cleared areas of the parks; much of the contemporary forest consists of maturing second-growth stands greater than 100 years old, with several *Quercus alba* L. (White Oak) more than 200 years old documented along the northern ridge of Great Falls Park (Abrams & Copenheaver, 1999). These deciduous and mixed deciduous/coniferous stands support a thick shrub layer and lush herbaceous flora. The diversity and abundance of spring ephemeral wildflowers on the Turkey Run Park floodplain rival those found anywhere in Virginia. The largest wetland area found in the parks is a 6 ha swamp, the remnant of an ancient Potomac River oxbow, which lies near the center of Great Falls Park. The combined vascular flora of these two parks contains more than 925 extant species (George Washington Memorial Parkway Biological Database, 2007).

#### MATERIALS AND METHODS

The Turkey Run Park inventories were conducted from April 1999 to October 2000 and contemporarily with Great Falls Park inventories from January 2004 through March 2007. Methods that we used to capture moths during this study included standard blacklight traps, ultraviolet light shown on a hung white sheet, fermented fruit and sugar baits painted on trees, collecting around incandescent lights on the outside of buildings, and general daylight searches for diurnal species. Blacklight traps consisted of a five-gallon plastic bucket fitted with a funnel, four-fold vane side extensions and a ceiling with a 15 watt blacklight in the center. Moths exiting the funnel are captured in the bottom of the bucket where they are killed by ethyl acetate or tetrachlorethane. Power is provided by a 12 volt sealed lead-acid battery. We sampled various locations and habitats within the parks and retained voucher specimens for each taxon found. A total of 29 taxa were documented only with photographic vouchers, two taxa were recorded solely on the basis of sight observations, and the remainder were vouchered as pinned specimens. The sight records are of *Amphion floridensis* (all author citations are provided in the list of species) on 3 June 2004, and *Hemaris thysbe* on 31 July 2006, both in Great Falls Park. Voucher specimens are deposited in the collection at the George

Washington Memorial Parkway (GWMP), Turkey Run Park Headquarters in McLean, Virginia. Photographic vouchers are labeled, saved on a compact disk, and curated with the pinned specimens.

#### RESULTS AND DISCUSSION

A total of 480 macrolepidopteran moth taxa from 281 genera in 13 families was documented within Turkey Run and Great Falls Parks. The most species rich family was the Noctuidae with 269 taxa, followed by Geometridae (108), Notodontidae (26), Arctiidae (24), Sphingidae and Saturniidae (12 each), Nolidae (9), Lymantriidae (8), Lasiocampidae (6), Apatelodidae, Uraniidae, and Thyatiridae (2 each), and Mimalonidae with just a single species. The highest species richness in any genus was found in *Acronicta* (19 species), followed by *Catocala* (12 species), *Zale* (10 species), *Macaria* and *Hypena* (9 species each), and *Idia* (8 species). The total macro-moth fauna recorded from Great Falls Park was 425 taxa. A total of 222 taxa was documented in Turkey Run Park from 1999 and 2000 and an additional 86 taxa were added between 2004 and 2007, bringing the total known macro-moth fauna of the park to 308 taxa. Fifty-five taxa were documented only in Turkey Run Park, 172 taxa were unique to Great Falls Park, and 253 taxa are known from both parks. Ludwig (2000) reported that the known macro-moth fauna of Virginia is approximately 1,200 species. Following this baseline, Turkey Run and Great Falls Parks support at least 40 percent of the macro-moth fauna of Virginia.

Our collection of *Abrostola urentis* (Variegated Brindle Moth) in Turkey Run Park is the first record for Virginia based on reviews of collections held by the Virginia Department of Conservation and Recreation, Division of Natural Heritage (Steve Roble, pers. comm.), the United States National Museum (USNM) collection at the Smithsonian Institution (Michael Pogue, pers. comm.), and a five-year inventory of macrolepidopteran moths in Hanover County, Virginia (Ludwig, 2000, 2001, 2002). This moth was photographed in Turkey Run Park on 26 July 2004, 10 and 14 September 2004, and on 21 June 2005 (Fig. 2). A voucher was collected on 10 September 2004 and is deposited in the GWMP collection. *Abrostola urentis* is a widespread species known from Nova Scotia and New Brunswick, west to British Columbia, and south to North Carolina in the East, to Kansas and northeastern Colorado in the Great Plains, and to Oregon in the West (Lafontaine & Poole, 1991). The nearest known locality to Virginia for this species is based on two records contributed by Doug Ferguson to the USNM collection from Sycamore Landing, Montgomery County,



Fig. 2. *Abrostola urentis* photographed in Turkey Run Park, Fairfax County, Virginia, on 26 July 2004.

Maryland, dated 30 April and 24 July (no year given). The larvae of this species are reported to feed on Stinging Nettle (*Urtica dioica* L., Urticaceae) and possibly on other species of Urticaceae as well (Lafontaine & Poole, 1991). *Urtica dioica* is found in Turkey Run Park but is also known in 30 other Virginia counties (Harvill et al., 1992). Other taxa in the Urticaceae that occur in Turkey Run Park are *Boehmeria cylindrica* (L.) Swartz. (False Nettle), *Laportea canadensis* (L.) Wedd. (Wood-Nettle), and *Pilea pumila* (L.) A Gray (Clear Weed), all of which are more common statewide than *U. dioica* (Harvill et al., 1992). Thus, the apparent rarity of *Abrostola urentis* in Virginia is unlikely related to the rarity of its host plant.

Although no federally endangered or threatened species were documented, eleven of the macro-moth species that we found in Turkey Run or Great Falls Parks are included on the Virginia invertebrate watch list due to their possible vulnerability to extirpation statewide (Roble, 2006). Six of these eleven species were found only in Great Falls Park, one was found only in Turkey Run Park, and four were recorded in both parks. The six species found in Great Falls Park and their state natural heritage ranks are *Acronicta spinigera* (Nondescript Dagger Moth) S1S3, *Anticlea multiferata* (Many-lined Carpet) S1S3, *Balsa tristrigella* (Three-lined Balsa Moth) S1S3, *Bellura brehmei* (Narrow-leaved Cattail Borer Moth) S1S3, *Eutelia pulcherrima* (Beautiful Eutelia) S1S4, and

*Euxoa violaris* (Violet Dart) S1S3. *Orthosia revicta* (Subdued Quaker Moth) S1S4 was found only in Turkey Run Park. *Acronicta radcliffei* (Radcliffe's Dagger Moth) S2S4, *Anticlea vasiliata* (Variable Carpet) S1S3, *Metarranthus indeclinata* (Pale Metarranthus) S2S4, and *Oligia crytora* (Mantled Brocade) S1S3, were recorded in both parks.

The host plants of *Euxoa violaris* and *Oligia crytora* are not known (Covell, 1984; Lafontaine, 1987). The other nine Virginia watch list macro-moths recorded during this inventory all use larval host plants that are common statewide (Harvill et al., 1992). These include woody deciduous trees, shrubs or vines in the genera *Quercus* (oaks), *Prunus* (cherry), *Ulmus* (elms), *Toxicodendron* (Poison Ivy and Poison Sumac), *Diospyros* (persimmon), *Crataegus* (hawthorn), *Tilia* (basswood), and *Rubus* (blackberries), and the herbaceous plants, *Typha angustifolia* L. (Narrow-leaved Cat-tail) and *Epilobium* spp. (willow-herb) (Covell, 1984; Wagner et al., 1997, 2001; Robinson et al., 2002; Wagner, 2005). Thus, the apparent rarity of these moths in Virginia is not due to a paucity of their larval host plants.

In spite of the statewide abundance of *Typha angustifolia* and *Epilobium* spp., the only documented host plants of *Bellura brehmei* and *Anticlea multiferata*, respectively, neither of these two plants has ever been documented from Great Falls or Turkey Run Parks, despite recent vascular plant surveys in these parks documenting over 925 taxa. Thus, these two moth species must have immigrated some distance to the park where they were captured or they are using alternate, unknown host plants. The taxon most closely allied to *T. angustifolia* that is found in Great Falls Park is *Typha latifolia* L. (Broad-leaved Cat-tail), but it is very rare there. The Onagraceae (evening-primrose family), to which *Epilobium* belongs, contains four other genera that are common in Great Falls Park, including species of *Circaea* (enchanter's nightshade), *Gaura* (biennial gaura), *Ludwigia* (water-primrose), and *Oenothera* (evening-primrose) that may be serving as additional host plants of *Anticlea multiferata* in the area around Great Falls Park.

Our records of *Euxoa violaris* and *Diachrysia aeorides* (specimens confirmed by Michael Pogue) from the Piedmont of Virginia represent physiographic range extensions for these two species within the Commonwealth. Previously, *Euxoa violaris* was known only from the Coastal Plain and *Diachrysia aeorides* only from the mountains. *Euxoa violaris* inhabits areas of loose, shifting sand such as beach and dune areas along the Atlantic Coastal Plain from Massachusetts to North Carolina (Lafontaine, 1987). Based on reviews of collections at USNM and the Virginia Department of



Conservation and Recreation, Division of Natural Heritage, there are only two previously known Virginia records of *Diachrysia aeroides*, both from high elevation sites in western Virginia (Steve Roble, pers. comm.).

Our inventory extended the known periods of adult activity for four species. Adult activity in *Costaconvexa centrostrigaria* has been documented as occurring from March through October (Covell, 1984), but we recorded it on 9 December 2004 during this inventory. The flight period for *Galgula partita* is reported as March through October (Covell, 1984). We documented this species in Turkey Run Park on 13 December 2006. Adult activity in *Cerastis tenebrifera* has been noted in most areas from late March until early May and as early as February in the South (Lafontaine, 1998). It was found in Turkey Run Park on 16 January 2007, as was *Iridopsis defectaria*, for which Covell (1984) gives the known flight period as February through November.

#### ACKNOWLEDGMENTS

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#### LIST OF SPECIES

Macro-moth taxa documented from Turkey Run and Great Falls parks are listed following the numerical sequence (except for placement of the family Nolidae) in Hodges et al. (1983). Taxa added subsequent to that checklist (or reassigned to other families or genera) are cited by the addition of a decimal to the number assigned to the most closely related known taxon. The periods of adult activity for Great Falls (GF) and Turkey Run (TR) parks are given based on dates when these taxa have been documented in the parks. Dates separated by a hyphen indicate that the taxon was documented on at least one day during each month within this continuum of months, whereas dates separated by a comma represent individual observation dates. The date of the earliest and latest observation is cited for each taxon. An "x" denotes that the taxon was found in the park indicated and a dash indicates that the species was not found in the park.

Hodges #	Family/Species	GF	TR	Dates Observed
<b>Thyatiridae</b>				
6237	<i>Pseudothyatira cymatophoroides</i> (Gn.)	x	x	15 Jun - 12 Jul
6240	<i>Euthyatira pudens</i> (Gn.)	x	—	19 Apr
<b>Geometridae</b>				
6258	<i>Alsophila pometaria</i> (Harris)	—	x	6 Dec -7 Feb
6261	<i>Helimata cycladata</i> Grt. & Rob.	x	—	3 Jun
6273	<i>Macaria pustularia</i> Gn.	x	x	3 - 11 Jun
6322	<i>Mellilla xanthometata</i> Wlk.	x	—	19 Aug
6326	<i>Macaria aemulataria</i> Wlk.	x	x	23 Apr - 11 Jun, 30 Sep
6331	<i>Macaria promiscuata</i> Fgn.	x	x	9 May - 13 Aug
6340	<i>Macaria minorata</i> (Pack.)	—	x	30 Aug
6341	<i>Macaria bicolorata</i> F.	x	x	16 May, 13 Aug
6342	<i>Macaria bisignata</i> Wlk.	x	x	8 May, 19 Jul
6348	<i>Macaria fissinotata</i> (Wlk.)	x	—	13 May
6352	<i>Macaria granitata</i> Gn.	x	x	19 - 23 Apr

Hodges #	Geometridae (continued)	GF	TR	Dates Observed
6353	<i>Macaria multilineata</i> Pack.	x	x	8 May - 3 Jun, 4 Aug
6362	<i>Digrammia continuata</i> (Wlk.)	x	x	8 May, 19 Aug
6386	<i>Digrammia ocellinata</i> (Gn.)	x	x	3 - 23 Jun
6405	<i>Digrammia gnophosaria</i> (Gn.)	x	—	19 Aug
6440	<i>Hypomecis gnopharia</i> (Gn.)	—	x	13 Aug
6443	<i>Glenoides texanaria</i> (Hulst)	x	—	30 Oct
6478	<i>Exilis pyrolaria</i> Gn.	x	x	4 - 8 Aug
6582	<i>Iridopsis vellivolata</i> Hulst.	x	—	29 Jul
6586	<i>Iridopsis defectaria</i> (Gn.)	x	x	16 Jan, 23 Apr, 10 Jun, 13 Aug
6588	<i>Iridopsis larvaria</i> (Gn.)	x	x	18 May - 13 Aug
6590	<i>Anavitrinella pampinaria</i> (Gn.)	x	x	13 - 19 Aug
6594	<i>Cleora sublimaria</i> (Gn.)	x	—	3 May
6597	<i>Ectropis crepuscularia</i> (D. & S.)	x	x	24 May - 29 Jun
6598	<i>Protoboarmia porcelaria</i> (Gn.)	x	—	6 Apr
6599	<i>Epimecis hortaria</i> (F.)	x	x	23 Apr - 13 Aug
6620	<i>Melanolophia canadaria</i> (Gn.)	x	x	19 Apr, 11 Jun, 13 Aug
6621	<i>Melanolophia signataria</i> (Wlk.)	x	x	3 Jun - 16 Jul
6640	<i>Biston betularia</i> L.	x	x	8 May, 29 Jul
6654	<i>Hypagyrtis unipunctata</i> (Haw.)	x	x	23 May - 13 Aug
6655	<i>Hypagyrtis esther</i> (Barnes)	x	x	11 Jun, 15 Aug
6658	<i>Phigalia titea</i> (Cram.)	x	x	13 Mar - 6 Apr
6659	<i>Phigalia denticulata</i> (Hulst)	—	x	12 Dec - 7 Feb
6660	<i>Phigalia strigataria</i> (Minot)	x	x	25 Mar - 6 Apr
6662	<i>Paleacrita vernata</i> (Peck)	—	x	18 Dec - 30 Jan, 14 Mar
6667	<i>Lomographa vestaliata</i> (Gn.)	x	x	8 - 9 May
6711	<i>Thysanopyga intractata</i> (Wlk.)	x	x	9 May - 23 Jun, 13 Aug
6720	<i>Lytrosis imitaria</i> (H.-S.)	x	x	10 - 15 Jun
6726	<i>Euchlaena obtusaria</i> (Hbn.)	x	—	3 May
6733	<i>Euchlaena amoenaria</i> (Gn.)	x	x	11 Jun, 19 Aug
6739	<i>Euchlaena irraria</i> (B. & McD.)	x	—	3 Jun
6740	<i>Xanthotype nrticaria</i> Swett.	x	—	19 Aug
6743	<i>Xanthotype sospeta</i> (Dru.)	x	—	3 Jun
6754	<i>Pero anctetaria</i> (Hbn.)	x	x	23 Apr - 3 Jun
6763	<i>Phaeoura quernaria</i> (Sm.)	x	—	9 May
6796	<i>Campaea perlata</i> (Gn.)	x	x	8 - 11 Jun, 19 Aug
6797	<i>Ennomos magnaria</i> Gn.	x	x	4 - 6 Oct
6798	<i>Ennomos subsignaria</i> (Hbn.)	x	x	2 - 8 Jun
6815	<i>Gueneria similaria</i> (Wlk.)	x	—	9 May
6823	<i>Metarranthis angularia</i> B.&McD.	x	x	3 - 10 Jun
6824	<i>Metarranthis amyrisaria</i> (Wlk.)	x	—	15 Jun
6825	<i>Metarranthis indeclinata</i> (Wlk.)	x	x	26 May - 15 Jun
6826	<i>Metarranthis hypochraria</i> (H.-S.)	x	x	3 - 11 Jun
6828	<i>Metarranthis homuraria</i> Grt. & Rob.	x	x	8 May, 4 Aug
6834	<i>Cepphis decoloraria</i> (Hulst)	x	—	15 Jun
6837	<i>Probole alienaria</i> (H.-S.)	x	x	8 May, 11 Jun, 19 Aug
6838	<i>Probole annicaria</i> (H.-S.)	x	x	9 May - 10 Jun, 13 Aug
6844	<i>Plagodis alcoolaria</i> (Gn.)	x	—	29 Jul
6884	<i>Besma endropiaria</i> (Grt. & Rob.)	x	—	3 Jun
6885	<i>Besma quercivoraria</i> (Gn.)	—	x	8 May
6892	<i>Lambdina pellucidaria</i> (Grt. & Rob.)	x	x	19 Apr - 5 May
6894	<i>Lambdina fervidaria athasaria</i> (Hbn.)	x	—	19 Apr
6941	<i>Eusarca confusaria</i> Hbn.	x	x	10 Jun, 19 Aug
6963	<i>Tetracis crocallata</i> Gn.	x	x	11 Jul - 19 Aug
6964	<i>Tetracis cachexiata</i> Gn.	x	—	19 Aug
6966	<i>Eutrapela clemataria</i> (Sm.)	x	x	23 Apr - 11 Jul

Hodges #	Geometridae (continued)	GF	TR	Dates Observed
6974	<i>Patalene olyzonaria puber</i> (Grt. & Rob.)	x	x	23 Jun - 6 Oct
6982	<i>Prochoerodes lineola</i> (Dru.)	x	x	14 Jun - 15 Aug
7009	<i>Nematocampa resistaria</i> (Haw.)	x	x	11 Jun - 11 Jul
7033	<i>Nemoria lixaria</i> (Gn.)	x	x	1 Sep - 4 Oct
7046	<i>Nemoria bistrigaria</i> Hbn.	x	x	6 Apr, 25 Jun
7053	<i>Dichorda iridaria</i> (Gn.)	x	—	28 Aug
7058	<i>Synchlora aerata</i> (F.)	x	—	3 Jun
7071	<i>Chlorochlamys chloroleucaria</i> (Gn.)	x	—	9 May
7084	<i>Hethemia pistasciaria</i> (Gn.)	x	—	9 May
7114	<i>Idaea demissaria</i> (Hbn.)	x	—	19 Aug
7115	<i>Idaea eremiata</i> (Hulst)	x	—	3 Jun
7123	<i>Idaea obfusaria</i> (Wlk.)	x	—	29 Jul
7132	<i>Pleuroprucha insulsaria</i> (Gn.)	x	x	13 Aug, 6 Oct
7136	<i>Cyclophora packardi</i> (Prout)	x	x	23 Apr, 23 Jun, 19 Aug
7139	<i>Cyclophora pendulinaria</i> (Gn.)	x	x	25 Jun - 16 Jul
7146	<i>Haematopis grataria</i> (F.)	x	x	10 Jun - 8 Sep
7147	<i>Calothyssanis amaturaria</i> (Wlk.)	—	x	8 May
7159	<i>Scopula limboundata</i> (Haw.)	x	x	3 Jun, 13 Aug
7169	<i>Scopula inductata</i> (Gn.)	x	—	3 Jun
7196	<i>Eulithis diversilineata</i> (Hbn.)	x	x	11 Jun - 16 Jul
7197	<i>Eulithis gracilineata</i> (Gn.)	x	x	3 Jun, 6 Oct
7237	<i>Hydriomena transfigurata</i> Swett	x	—	19 Apr
7239	<i>Hydriomena pluviala</i> (Gn.)	x	x	6 - 12 Apr
7290	<i>Coryphista meadii</i> (Pack.)	—	x	15 Aug
7329	<i>Anticlea vasiliata</i> Gn.	x	x	23 Apr, 15 Jun
7330	<i>Anticlea multiferata</i> (Wlk.)	x	—	9 May
7333	<i>Stannodes gibbicostata</i> (Wlk.)	—	x	6 Oct
7388	<i>Xanthorhoe ferrugata</i> Clerck	—	x	1 Aug
7399	<i>Euphyia umangulata</i> (Haw.)	x	x	23 Jun, 19 Aug
7414	<i>Orthonamia obstipata</i> (F.)	x	x	14 Mar - 23 Apr, 4 Aug - 30 Sep
7416	<i>Costaconvexa centrostrigaria</i> (Woll.)	x	x	23 Apr - 21 Aug, 30 Nov, 9 Dec
7430	<i>Trichodezia albovittata</i> (Gn.)	—	x	9 May
7437	<i>Operophtera bruceata</i> (Hulst)	—	x	5 Dec
7440	<i>Eubaphe mendica</i> (Wlk.)	x	x	11 Jun, 19 Aug
7459	<i>Eupithecia columbiata</i> (Dyar)	x	—	6 Apr
7474	<i>Eupithecia miserulata</i> Grt.	x	—	4 Oct
7509.1	<i>Eupithecia matheri</i> Rindge	x	—	6 Apr
7530	<i>Eupithecia swetti</i> Grossb.	x	x	25 Mar - 6 Apr
7637	<i>Cladara limitaria</i> (Wlk.)	x	—	6 Apr
7647	<i>Heterophleps triguttaria</i> H.-S.	x	x	2 Jun, 19 Aug
7648	<i>Dyspteris abortivaria</i> (H.-S.)	x	x	10 Jun - 29 Jul
<b>Uraniidae</b>				
7650	<i>Callizzia amorata</i> Pack.	—	x	23 Jun
7653	<i>Calledapteryx dryopterata</i> Grt.	x	x	15 Jun, 15 Aug
<b>Mimallonidae</b>				
7659	<i>Lacosoma chiridota</i> Grt.	x	x	11 - 23 Jun
<b>Apatelodidae</b>				
7663	<i>Apatelodes torrefacta</i> (Sm.)	x	x	11 - 15 Jun
7665	<i>Olceclostera angelica</i> (Grt.)	—	x	23 Jun, 14 Aug

Hodges #	Family/Species	GF	TR	Dates Observed
<b>Lasiocampidae</b>				
7670	<i>Tolyte vellea</i> (Stoll)	x	x	29 Sep - 30 Oct
7674	<i>Tolyte notialis</i> (F.)	—	x	16 Jul
7683	<i>Artace cribraria</i> (Ljungh)	x	x	17 Jun, 30 Sep - 6 Oct
7687	<i>Phyllodesma americana</i> (Harr.)	x	—	19 Apr
7698	<i>Malacosoma disstria</i> Hbn.	x	x	3 - 11 Jun
7701	<i>Malacosoma americanum</i> (F.)	x	x	4 - 15 Jun
<b>Saturniidae</b>				
7704	<i>Eacles imperialis</i> (Dr.)	x	x	16 Jul - 8 Aug
7706	<i>Citheronia regalis</i> (F.)	x	x	3 Jun - 4 Aug
7708	<i>Citheronia sepulchralis</i> Grt. & Rob.	—	x	13 Aug
7715	<i>Dryocampa rubicunda</i> (F.)	x	x	12 May - 23 Jun, 13 Aug
7716	<i>Anisota stigma</i> (F.)	x	—	12 Jul
7723	<i>Anisota senatoria</i> (J.E. Sm.)	x	—	12 Jul
7746	<i>Antomeris io</i> (F.)	x	x	14 - 15 Jun
7757	<i>Antheraea polyphemus</i> (Cram.)	x	x	11 May
7758	<i>Actias luna</i> (L.)	x	—	3 Jun
7764	<i>Callosamia promethea</i> (Dr.)	—	x	12 May
7765	<i>Callosamia angulifera</i> (Wlk.)	x	x	18 May - 11 Jun
7767	<i>Hyalophora cecropia</i> (L.)	x	—	9 Aug
<b>Sphingidae</b>				
7778	<i>Manduca rustica</i> (F.)	x	—	5 Sep
7784	<i>Dolba hyloens</i> (Dr.)	x	x	9 - 15 Jun
7789	<i>Ceratomia catalpae</i> (Bdv.)	x	x	15 Jun, 27 Aug - Sep 27
7793	<i>Paratreia plebeja</i> (F.)	x	—	29 Jul
7824	<i>Paonias excaecatus</i> (Sm.)	x	—	29 Jul
7825	<i>Paonias nyops</i> (Sm.)	x	x	8 May, 29 Jul
7827	<i>Laothoe juglandis</i> (Sm.)	x	x	11 May - 23 Jun
7853	<i>Hemaris thysbe</i> (F.)	x	—	31 Jul
7871	<i>Deidamia inscripta</i> (Harris)	—	x	14 Apr
7870	<i>Sphecodina abbottii</i> Swainson	—	x	April 24 - 18 May
7873	<i>Amphion floridensis</i> Clark	x	—	3 Jun
7885	<i>Darapsa myron</i> (Cram.)	x	x	9 Jun - 25 Jul
<b>Notodontidae</b>				
7902	<i>Datana ministra</i> (Drury)	x	x	13 - 29 Aug
7903	<i>Datana angusii</i> Grt. & Rob.	x	x	3 Jun - 13 Aug
7904	<i>Datana drexelii</i> Hy. Edw.	—	x	10 Jun, 13 Aug
7906	<i>Datana contracta</i> Wlk.	—	x	8 Jun - 11 Jul
7907	<i>Datana integerrima</i> Grt. & Rob.	x	x	19 Jun - 13 Aug
7915	<i>Nadata gibbosa</i> (Sm.)	x	x	8 May - 11 Jun, 13 Aug
7920	<i>Peridea angulosa</i> (Sm.)	x	—	19 Aug
7929	<i>Nerice bidentata</i> Wlk.	x	x	22 May - 11 Jun, 13 Aug
7930	<i>Ellida caniplaga</i> (Wlk.)	—	x	23 Apr - 23 Jun, 13 Aug
7931	<i>Gluphisia septentrionis</i> Wlk.	x	x	8 May, 3 Jun, 30 Aug
7951	<i>Symmerista albifrons</i> (Sm.)	x	x	18 Apr - 13 Aug
7957	<i>Dasylophia anguina</i> (Sm.)	x	x	10 Jun, 16 Aug - 5 Sep
7974	<i>Misogada unicolor</i> (Pack.)	x	—	19 Aug
7975	<i>Macrurocampa marthesia</i> (Cram.)	x	x	11 Jun
7983	<i>Heterocampa obliqua</i> Pack.	x	x	3 Jun, 13 Aug
7990	<i>Heterocampa umbrata</i> Wlk.	x	—	29 Jul
7994	<i>Heterocampa guttivitta</i> (Wlk.)	x	x	19 Apr - 6 Sep
7995	<i>Heterocampa biundata</i> Wlk.	x	x	8 May, 11 Jun, 15 Aug



Hodges #	Notodontidae (continued)	GF	TR	Dates Observed
7998	<i>Lochmaeus manteo</i> Doubleday	x	x	4 - 19 Aug
7999	<i>Lochmaeus bilineata</i> (Pack.)	x	x	23 May - 29 Jul, 27 Aug
8005	<i>Schizura ipomoeae</i> Doubleday	—	x	23 Jun, 21 Aug
8007	<i>Schizura unicornis</i> (Sm.)	x	x	3 May - 30 Jun
8011	<i>Schizura leptinoides</i> (Grt.)	x	—	15 Jun
8012	<i>Oligocentria semirufescens</i> (Wlk.)	x	x	29 Jul - 13 Aug
8017	<i>Oligocentria lignicolor</i> (Wlk.)	x	x	8 May - 23 Jun, 13 Aug
8022	<i>Hyparpax aurora</i> (J.E. Sm.)	x	—	23 Jun
<b>Arctiidae</b>				
8067	<i>Cisthene plumbea</i> Stretch	x	x	8 Jun, 26 Aug
8087	<i>Lycomorpha pholus</i> Dr.	x	—	23 Jun
8089	<i>Hypoprepia miniata</i> (Kby.)	x	—	29 Jul
8090	<i>Hypoprepia fucosa</i> Hbn.	—	x	30 Jun - 13 Aug
8098	<i>Clemensia albata</i> Pack.	x	—	3 Jun
8107	<i>Haploa chymene</i> (Brown)	x	x	11 - 29 Jul
8118	<i>Holomelina opella</i> (Grt.)	x	—	5 Sep
8121	<i>Holomelina aurantiaca</i> (Hbn.)	x	—	19 Aug
8129	<i>Pyrrharctia isabella</i> (Sm.)	x	x	11 May - 11 Jul
8133	<i>Spilosoma latipennis</i> Stretch	x	x	3 - 11 Jun
8134	<i>Spilosoma congrua</i> Wlk.	x	x	8 May - 10 Jun
8137	<i>Spilosoma virginica</i> (F.)	x	x	8 May - 23 Jun, 4 Aug
8140	<i>Hyphantria cunea</i> Dr.	x	x	8 May - 13 Aug
8146	<i>Hypercompe scribonia</i> Stoll	x	x	4 Jun - 15 Jul
8169	<i>Apantesis phalerata</i> (Harr.)	x	—	19 Aug
8171	<i>Apantesis nais</i> (Dru.)	x	x	15 Jun - 19 Aug
8171.1	<i>Apantesis carlotta</i> Fgn.	x	x	22 May - 13 Aug
8176	<i>Grammia anna</i> (Grt.)	x	—	15 Jul
8177	<i>Grammia virgo</i> (L.)	x	—	19 Aug
8188	<i>Grammia figurata</i> (Dru.)	—	x	29 Jul - 13 Aug
8203	<i>Halysidota tessellaris</i> (Sm.)	x	x	1 Jun - 13 Aug
8230	<i>Cyenia tenera</i> Hbn.	x	x	8 May - 10 Jun, 13 Aug - 9 Sep
8238	<i>Euchaetes egle</i> (Dr.)	x	x	11 Jun - 29 Jul
8267	<i>Cisseps fulvicollis</i> (Hbn.)	x	—	30 Oct
<b>Lymantriidae</b>				
8292	<i>Dasychira tephra</i> Hbn.	—	x	23 Jun
8293	<i>Dasychira dorsipennata</i> (B. & McD.)	x	—	16 Jul
8296	<i>Dasychira basiflava</i> (Pack.)	x	x	10 Jun - 19 Aug
8298	<i>Dasychira meridionalis</i> (B. & McD.)	—	x	13 Aug
8302	<i>Dasychira obliquata</i> (Grt. & Rob.)	x	—	29 Jul
8314	<i>Orgyia definita</i> Pack.	x	x	23 Jun, 4 Oct
8316	<i>Orgyia leucostigma</i> (J.E. Smith)	—	x	12 Aug, 1 Nov
8318	<i>Lymantria dispar</i> (L.)	—	x	17 Jun
<b>Nolidae</b>				
8970	<i>Baileya ophthalmica</i> (Gn.)	x	x	8 May - 11 Jun, 4 Aug
8971	<i>Baileya dormitans</i> (Gn.)	x	x	3 - 23 Jun
8972	<i>Baileya levitans</i> (Sm.)	x	—	29 Jul
8973	<i>Baileya australis</i> (Grt.)	x	x	8 May, 19 Aug
8983	<i>Meganola minuscula</i> (Zell.)	x	x	9 May, 14 Jul - 1 Aug
8983.1	<i>Meganola phylla</i> (Dyar)	x	—	3 May
8983.2	<i>Meganola spodia</i> Franc.	x	—	3 May
8991	<i>Nola cereella</i> (Bosc.)	x	—	29 Jun
8992	<i>Nola triquetra</i> (Fitch)	x	x	23 Apr, 3 Jun

Hodges #	Family/Species	GF	TR	Dates Observed
<b>Noctuidae</b>				
8322	<i>Idia americalis</i> (Gn.)	x	x	8 May - 6 Oct
8323	<i>Idia aemula</i> (Hbn.)	x	x	11 Jun - 13 Aug
8326	<i>Idia rotundalis</i> (Wlk.)	x	—	3 Jun
8328	<i>Idia julia</i> (B. & McD.)	x	—	3 Jun
8329	<i>Idia diminuendis</i> (B. & McD.)	x	—	3 Jun
8330	<i>Idia scobialis</i> (Grt.)	x	—	15 Jun
8333	<i>Idia denticulalis</i> (Harvey)	x	—	15 Jun
8334	<i>Idia lubricalis</i> (Gey.)	x	x	23 Jun - 11 Jul, 3 Sep
8338	<i>Phalaenophana pyramusalis</i> (Wlk.)	x	x	22 May - 23 Jun
8340	<i>Zanclognatha lituralis</i> (Hbn.)	x	x	8 May - 3 Jun, 4 Aug
8345	<i>Zanclognatha laevigata</i> (Grt.)	x	—	15 Jun
8347	<i>Zanclognatha obscuripennis</i> (Grt.)	x	x	13 Jun, 19 Aug
8349	<i>Zanclognatha protumnusalis</i> (Wlk.)	x	—	27 Aug
8351	<i>Zanclognatha cruralis</i> (Gn.)	x	x	10 Jun, 19 Aug
8352	<i>Zanclognatha jacchusalis</i> (Wlk.)	x	x	11 Jun, 30 Aug
8353	<i>Zanclognatha ochreipennis</i> (Grt.)	x	x	22 Jun - 4 Aug, 6 Oct
8355	<i>Chytolita morbidalis</i> (Gn.)	x	—	3 Jun
8356	<i>Chytolita petrealis</i> Grt.	x	x	29 Jul - 13 Aug
8358	<i>Macrochilo litophora</i> (Grt.)	x	x	3 Jun, 4 Aug
8360	<i>Macrochilo orciferalis</i> Wlk.	x	—	3 Jun
8364	<i>Phalaenostola larentoides</i> Grt.	x	x	3 Aug - 10 Sep
8368	<i>Tetanolita floridana</i> (Sm.)	x	—	4 Oct
8370	<i>Bleptina caradrinalis</i> Gn.	x	x	3 Jun - 13 Aug
8378	<i>Renia salusalis</i> (Wlk.)	x	—	29 Jul
8380	<i>Renia nemoralis</i> B. & McD.	x	—	22 May
8381	<i>Renia discoloralis</i> Gn.	x	x	11 Jul - 19 Aug
8386	<i>Renia adspersgilus</i> (Bosc.)	x	x	3 - 11 Jun
8393	<i>Lascoria ambigualis</i> Wlk.	x	x	3 Jun - 27 Jul
8397	<i>Palthis angulalis</i> (Hbn.)	x	x	8 May, 19 Aug
8398	<i>Palthis asopialis</i> (Gn.)	x	x	8 May - 19 Aug, 6 Oct
8401	<i>Redectis vitrea</i> (Grt.)	x	—	5 Sep
8404	<i>Rivula propinqualis</i> Gn.	x	x	19 - 28 Aug
8420	<i>Hypenodes caducus</i> (Dyar)	x	—	22 May
8421	<i>Hypenodes fractilinea</i> (Sm.)	x	—	29 Jul
8428	<i>Dyspyralis nigella</i> (Stkr.)	x	—	3 Jun
8440	<i>Nigetia formosalis</i> Wlk.	x	—	22 Jun
8441	<i>Hypena nanalis</i> (Wlk.)	x	—	3 Jun
8442	<i>Hypena baltimoralis</i> (Gn.)	x	x	8 May - 12 Sep
8443	<i>Hypena bijugalis</i> (Wlk.)	x	x	9 May, 12 Aug
8444	<i>Hypena palparia</i> (Wlk.)	x	x	22 May, 13 Aug
8445	<i>Hypena abalienalis</i> (Wlk.)	—	x	11 Aug - 15 Sep
8446	<i>Hypena deceptalis</i> (Wlk.)	x	x	8 May, 30 Jul
8447	<i>Hypena madefactalis</i> (Gn.)	x	x	15 Jun - 10 Jul
8461	<i>Hypena humuli</i> Harris	—	x	27 Jul
8465	<i>Hypena scabra</i> (F.)	x	x	23 Apr - 30 Sep, 7 Nov - 19 Dec
8479	<i>Spargaloma sexpunctata</i> Grt.	x	x	10 Jun, 19 Aug
8490	<i>Pangrapta decoralis</i> Hbn.	x	—	3 Jun
8491	<i>Ledaea perditalis</i> (Wlk.)	x	—	29 Aug
8499	<i>Metalectra discalis</i> (Grt.)	x	x	23 Jun - 13 Aug
8500	<i>Metalectra quadrisignata</i> (Wlk.)	x	—	4 Oct
8505	<i>Metalectra richardsi</i> Brower	x	—	3 Jun
8514	<i>Scolecocampa liburna</i> (Gey.)	x	x	11 Jun - 29 Jul
8522	<i>Gabara subnivosella</i> Wlk.	—	x	11 Jun
8525	<i>Phyprosopus callitrichoides</i> Grt.	x	—	3 Jun

Hodges #	Noctuidae (continued)	GF	TR	Dates Observed
8528	<i>Hypsoropha hormos</i> (Hbn.)	x	—	9 May
8534	<i>Plusiodonta compressipalpus</i> Gn.	x	x	13 Jul - 19 Aug
8547	<i>Anomis commoda</i> Butler	—	x	6 Sep
8555	<i>Scoliopteryx libatrix</i> (L.)	x	x	23 Apr, 29 Jul
8574	<i>Anticarsia gemmatalis</i> Hbn.	x	—	4 Oct
8587	<i>Panopoda rufimargo</i> (Hbn.)	x	x	8 May - 9 Jun, 13 Aug
8588	<i>Panopoda carneicosta</i> Gn.	x	x	3 - 11 Jun
8591	<i>Phoberia atomaris</i> Hbn.	x	—	6 Apr
8592	<i>Cissusa spadix</i> (Cram.)	x	x	19 - 25 Apr
8689	<i>Zale lunata</i> (Dr.)	x	x	16 Jun, 6 Oct
8692	<i>Zale galbanata</i> (Morr.)	x	x	23 Apr - 11 Jun, 27 Aug
8694	<i>Zale aeruginosa</i> (Gn.)	x	x	23 Apr - 9 May
8695	<i>Zale undularis</i> (Dr.)	x	—	29 Jul
8697	<i>Zale minerea</i> (Gn.)	x	x	8 May - 29 Jul
8698	<i>Zale phaeocapna</i> Franc.	—	x	8 May
8704	<i>Zale helata</i> (Sm.)	x	x	11 - 15 Jun
8713	<i>Zale lunifera</i> (Hbn.)	x	—	6 Apr
8716	<i>Zale unilineata</i> (Grt.)	x	x	19 Apr - 8 May
8717	<i>Zale horrida</i> Hbn.	x	x	8 May - 22 Jul
8719	<i>Euparthenos nubilis</i> (Hbn.)	x	x	9 May - 18 Jun
8721	<i>Allothia elonympha</i> (Hbn.)	x	x	9 May - 13 Aug
8727	<i>Parallela bistriaris</i> Hbn.	x	x	19 May - 13 Aug
8738	<i>Caenurgina crassiuscula</i> (Haworth)	x	x	10 Jun, 13 Aug, 4 Oct
8739	<i>Caenurgina erechtea</i> (Cram.)	x	x	23 Apr, 10 Jun, 13 Aug, 4 Oct
8745	<i>Mocis texana</i> (Morr.)	x	—	4 Oct
8747	<i>Celiptera frustulum</i> Gn.	x	x	8 May, 11 Jul - 4 Oct
8769	<i>Spiloloma humilinea</i> Grt.	x	x	3 - 10 Jun
8771	<i>Catocala piatrix</i> Grt.	x	x	23 Aug - 18 Oct
8782	<i>Catocala flebilis</i> Grt.	—	x	13 Aug
8788	<i>Catocala resecta</i> Grt.	x	x	13 - 19 Aug
8792	<i>Catocala vidua</i> (Sm.)	x	x	13 Aug - 14 Sep
8795	<i>Catocala palaeogama</i> Gn.	x	x	19 - 24 Aug
8796	<i>Catocala nebulosa</i> Edw.	x	—	29 Jul
8797	<i>Catocala subnata</i> Grt.	x	—	19 Aug
8798	<i>Catocala neogama</i> (Sm.)	x	x	29 Jul, 6 Oct
8801	<i>Catocala ilia</i> (Cram.)	x	x	29 Jun, 19 Aug
8802	<i>Catocala cerogama</i> Gn.	x	x	29 Jul - 16 Aug
8857	<i>Catocala ultronia</i> (Hbn.)	x	x	11 Jul - 19 Aug
8878	<i>Catocala amica</i> (Hbn.)	x	x	4 Aug - 3 Sep
8881	<i>Abrostola urentis</i> Gn.	—	x	21 Jun - 26 Jul, 14 Sep
8889	<i>Ctenoplusia oxygramma</i> (Gey.)	x	x	3 Jun, 29 Sep
8890	<i>Pseudoplusia includens</i> (Wlk.)	—	x	28 Sep
8896	<i>Diachrysia aeroides</i> (Grt.)	x	—	14 Aug
8898	<i>Allagrapha aerea</i> (Hbn.)	x	x	8 May - 19 Aug
8908	<i>Autographa precationis</i> (Gn.)	x	x	23 Apr - 11 Jun, 13 Aug - 5 Sep
8924	<i>Anagrapha falcifera</i> (Kby.)	x	x	23 Apr, 11 Jun, 4 Oct
8955	<i>Marathyssa inficita</i> (Wlk.)	x	—	3 Jun
8957	<i>Paectes oculatrix</i> (Gn.)	x	x	8 May - 29 Jul
8962	<i>Paectes abrostoloides</i> (Gn.)	x	—	29 Jul
8968	<i>Eutelia pulcherrima</i> (Grt.)	x	—	22 May
9025	<i>Oruza albocostaliata</i> (Pack.)	x	—	22 May
9030	<i>Ozarba aerea</i> (Grt.)	x	x	3 May, 13 Aug
9037	<i>Hyperstrotia pervertens</i> (B. & McD.)	x	—	3 Jun
9040	<i>Hyperstrotia secta</i> (Grt.)	x	—	9 May
9044	<i>Thioptera nigrofimbria</i> (Gn.)	x	x	16 Jul - 25 Sep

Hodges #	Noctuidae (continued)	GF	TR	Dates Observed
9047	<i>Lithacodia nmscosula</i> (Gn.)	x	x	3 Jun - 1 Aug
9051	<i>Lithacodia musta</i> (Grt. & Rob.)	x	—	16 Jul
9053	<i>Pseudenstrotia carneola</i> (Gn.)	x	x	3 Jun - 13 Aug
9055.1	<i>Maliattha synochitis</i> (Grt. & Rob.)	x	—	29 Jul
9057	<i>Homophoberia apicosa</i> (Haw.)	—	x	10 Jun
9062	<i>Cerma cerintha</i> (Tr.)	x	—	29 Jul
9065	<i>Leuconycta diptheroides</i> (Gn.)	x	—	3 Jun
9127	<i>Spragueia leo</i> (Gn.)	x	—	23 Aug
9182	<i>Panthea furcilla</i> (Pack.)	x	—	19 Aug
9184	<i>Colocasia flavicornis</i> (Sm.)	x	—	19 Apr
9185	<i>Colocasia propinquila</i> (Grt.)	x	—	9 May
9189	<i>Charadra deridens</i> (Gn.)	x	x	29 Jul - 13 Aug
9193	<i>Raphia frater</i> Grt.	x	—	29 Jul
9199	<i>Acronicta rubricoma</i> Gn.	x	—	29 Jul
9200	<i>Acronicta americana</i> (Harr.)	x	x	9 May - 18 Jun
9208	<i>Acronicta betulae</i> Riley	x	x	8 May, 29 Jul
9209	<i>Acronicta radcliffei</i> (Harv.)	x	x	17 Jun, 5 Sep
9227	<i>Acronicta laetifica</i> Sm.	x	x	22 May - 4 Aug
9229	<i>Acronicta hasia</i> Gn.	x	x	11 - 15 Jun
9235	<i>Acronicta spinigera</i> Gn.	x	—	3 Jun
9237	<i>Acronicta interrupta</i> Gn.	x	x	22 May, 9 Sep
9238	<i>Acronicta lobeliae</i> Gn.	x	x	9 May - 17 Jun
9242	<i>Acronicta exilis</i> Grt.	x	—	3 Jun
9243	<i>Acronicta ovata</i> Grt.	x	x	3 Jun, 13 Aug
9244	<i>Acronicta modica</i> Wlk.	x	x	8 May - 15 Jun
9249	<i>Acronicta increta</i> Morr.	x	—	8 May - 11 Jun, 19 Aug
9251	<i>Acronicta retardata</i> (Wlk.)	x	x	8 May - 3 Jun, 6 Aug
9254	<i>Acronicta afflicta</i> Grt.	x	—	15 Jun
9257	<i>Acronicta impleta</i> Wlk.	x	x	8 May, 14 Aug
9259	<i>Acronicta noctivaga</i> Grt.	x	—	29 Jun
9264	<i>Acronicta longa</i> Gn.	x	—	19 Aug
9266	<i>Acronicta lithospila</i> Grt.	—	x	16 Jun
9281	<i>Agriopodes fallax</i> (H.-S.)	x	x	3 Jun, 13 Aug
9285	<i>Polygrammate hebraeicum</i> Hbn.	x	x	8 May - 23 Jun, 13 Aug
9285.1	<i>Comachara cadburyi</i> Franc.	x	—	9 May
9301	<i>Eudryas grata</i> (F.)	x	x	9 May - 10 Jun, 13 Aug
9309	<i>Psychomorpha epimenis</i> (Dr.)	x	x	14 - 20 Apr
9314	<i>Alypia octomaculata</i> (F.)	—	x	28 Apr
9332	<i>Apamea vulgaris</i> (Grt. & Rob.)	x	x	3 - 10 Jun
9404	<i>Oligia modica</i> (Gn.)	—	x	19 Aug
9410	<i>Oligia crytora</i> Franc.	x	x	10 Jun - 29 Jul
9419	<i>Oligia mactata</i> (Gn.)	—	x	30 Sep
9449	<i>Archanara oblonga</i> (Grt.)	x	—	3 Jun
9454	<i>Amphipoea velata</i> (Wlk.)	x	x	3 - 23 Jun
9463	<i>Parapamea buffaloensis</i> (Grt.)	x	—	14 Sep
9466	<i>Papaipema cataphracta</i> (Grt.)	x	x	4 - 6 Oct
9471	<i>Papaipema arctivorens</i> Hamp.	x	—	12 Sep
9479	<i>Papaipema lysimachiae</i> (Wlk.)	x	—	12 Sep
9483	<i>Papaipema inquaesita</i> (Grt. & Rob.)	x	—	25 Sep
9484	<i>Papaipema rutila</i> (Gn.)	—	x	30 Sep
9486	<i>Papaipema birdi</i> Dyar	—	x	27 Sep
9520	<i>Achatodes zaeae</i> (Harr.)	x	—	10 Jun
9522	<i>Iodopepla n-album</i> (Gn.)	x	—	29 Jul
9524	<i>Bellura brehmei</i> (B. & McD.)	x	—	15 Jun
9526	<i>Bellura densa</i> (Wlk.)	x	—	19 Aug
9545	<i>Euplexia benesimilis</i> (McD.)	x	x	12 May, 13 Jul - 19 Aug

Hodges #	Noctuidae (continued)	GF	TR	Dates Observed
9547	<i>Phlogophora periculosa</i> Gn.	x	x	19 Aug - 30 Sep
9556	<i>Chytonix palliatricula</i> (Gn.)	x	x	8 May - 11 Jun, 19 Aug
9582	<i>Nedra ramosula</i> (Gn.)	x	x	15 Sep - 4 Oct
9618	<i>Phosphila turbulenta</i> Hbn.	x	x	8 May - 10 Jun
9619	<i>Phosphila miselioides</i> (Gn.)	x	x	8 May - 3 Jun
9631	<i>Callopietria mollissima</i> (Gn.)	x	—	19 Aug
9638	<i>Anhipyria pyramidoides</i> Gn.	x	x	10 Jul - 6 Oct
9647	<i>Atheris miranda</i> (Grt.)	x	—	8 Aug
9650	<i>Anorthodes tarda</i> (Gn.)	x	x	8 May, 19 Aug
9663	<i>Balsa tristrigella</i> (Wlk.)	x	—	29 Jul
9664	<i>Balsa labecula</i> (Grt.)	x	—	3 Jun
9666	<i>Spodoptera frugiperda</i> (Sm.)	x	—	5 Sep
9669	<i>Spodoptera ornithogalli</i> (Gn.)	x	x	13 Aug, 30 Oct
9678	<i>Elaphria versicolor</i> (Grt.)	x	—	3 Jun
9679	<i>Elaphria chalcedonia</i> (Hbn.)	x	—	31 Oct
9681.1	<i>Elaphria cornutinus</i> Sal. & Pogue	x	x	8 May, 29 Jul - 13 Aug
9684	<i>Elaphria grata</i> Hbn.	x	x	23 Apr, 13 Aug - 6 Oct
9688	<i>Galgula partita</i> Gn.	x	x	21 Mar - 23 Apr, 10 Jun - 13 Dec
9690	<i>Condica videns</i> (Gn.)	x	—	3 Jun
9693	<i>Condica mobilis</i> (Wlk.)	x	—	3 Jun
9696	<i>Condica vecors</i> (Gn.)	x	x	23 Apr, 14 Jul - 8 Sep
9699	<i>Condica sutor</i> (Gn.)	x	—	5 Sep
9720	<i>Ogdoconta cinereola</i> (Gn.)	x	—	9 Sep
9725	<i>Azenia obtusa</i> (H.-S.)	x	x	3 Jun, 4 Aug
9781	<i>Basilodes pepita</i> (Gn.)	—	x	23 Aug - 6 Sep
9886	<i>Lithophane patefacta</i> (Wlk.)	x	x	23 Apr, 30 Oct
9887	<i>Lithophane bethunei</i> (Grt. & Rb.)	x	—	22 Mar
9895	<i>Lithophane signosa</i> (Wlk.)	—	x	18 Apr
9910	<i>Lithophane antennata</i> (Wlk.)	—	x	12 Mar
9915	<i>Lithophane grotei</i> Riley	x	x	7 Feb, 6 Apr, 8 Nov
9916	<i>Lithophane unimoda</i> (Lint.)	x	—	6 Apr
9929	<i>Pyreferra hesperidago</i> (Gn.)	x	—	6 Apr
9932	<i>Pyreferra pettiti</i> (Grt.)	x	x	6 - 23 Apr
9933	<i>Eupsilia vimilenta</i> (Grt.)	x	—	6 Apr
9933.1	<i>Enpsilia sidus</i> (Gn.)	x	—	6 Apr
9934	<i>Eupsilia cirripalea</i> Franc.	x	—	6 Apr
9934.1	<i>Eupsilia</i> sp. nov.	—	x	23 Apr
9936	<i>Eupsilia morrisoni</i> (Grt.)	x	x	7 Mar, 30 Oct - 13 Dec
9941	<i>Sericaglaea signata</i> French	x	x	23 Apr, 31 Oct - 16 Nov
9943	<i>Metaxaglaea inulta</i> (Grt.)	x	x	4 - 6 Oct
9945.2	<i>Metaxaglaea violacea</i> Schw.	x	—	4 Oct
9946	<i>Epiglaea decliva</i> (Grt.)	x	—	31 Oct
9957	<i>Agrochola bicolorago</i> (Gn.)	x	x	6 Oct - 29 Dec
10019	<i>Psaphida resumens</i> Wlk.	x	x	26 Mar - 15 Apr
10021	<i>Copivaleria grotei</i> (Morr.)	x	x	20 Mar - 6 Apr
10202	<i>Cucullia convexipennis</i> Grt. & Rob.	—	x	4 Aug
10288	<i>Polia detracta</i> (Wlk.)	x	x	3 - 15 Jun
10368	<i>Lacinipolia meditata</i> (Grt.)	x	—	5 Sep
10397	<i>Lacinipolia renigera</i> (Steph.)	x	x	8 May - 11 Jun, 26 Aug - 15 Sep
10413	<i>Lacinipolia explicata</i> McD.	x	x	8 May, 29 Aug - 5 Sep
10414	<i>Lacinipolia implicata</i> McD.	x	—	5 Sep
10431	<i>Faronta diffusa</i> (Wlk.)	x	—	30 Sep
10438	<i>Mythimna unipuncta</i> (Haw.)	x	x	4 May, 9 Jul - 4 Aug, 4 Oct - 1 Nov
10440	<i>Leucania linia</i> Gn.	x	—	3 Jun
10445	<i>Leucania linda</i> Franc.	x	x	10 Jun, 19 Aug



Hodges #	Noctuidae (continued)	GF	TR	Dates Observed
10455	<i>Leucania scirpicola</i> Gn.	x	—	5 Sep
10456	<i>Leucania adjuta</i> (Grt.)	x	x	4 - 6 Oct
10459	<i>Leucania inermis</i> (Forbes)	x	x	3 - 11 Jun
10461	<i>Leucania ursula</i> (Forbes)	x	x	10 Jun, 14 Aug
10487	<i>Orthosia rubescens</i> (Wlk.)	x	x	14 Mar - 23 Apr
10490	<i>Orthosia revicta</i> (Morr.)	—	x	30 Mar
10491	<i>Orthosia aluvina</i> Sm.	x	—	6 Apr
10495	<i>Orthosia hibisci</i> (Gn.)	x	x	6 - 23 Apr
10502	<i>Himella intractata</i> (Morr.)	x	x	6 - 23 Apr
10518	<i>Achatia distincta</i> Hbn.	x	x	6 - 25 Apr
10520	<i>Morrisonia evicta</i> (Grt.)	x	—	19 Apr
10521	<i>Morrisonia confusa</i> (Hbn.)	x	x	19 Apr - 8 May
10521.1	<i>Morrisonia latex</i> (Gn.)	—	x	26 May
10524	<i>Nephelodes minians</i> Gn.	x	x	5 - 30 Sep
10532	<i>Homorthodes fufurata</i> (Grt.)	x	—	3 Jun
10532.1	<i>Homorthodes lindseyi</i> (Benj.)	x	x	8 May, 19 Aug
10563	<i>Protorthodes oviduca</i> (Gn.)	x	—	3 Jun
10567	<i>Ulolonche culea</i> (Gn.)	x	x	8 May - 3 Jun
10578	<i>Pseudorthodes vecors</i> (Gn.)	x	x	9 May, 15 Aug
10585	<i>Orthodes crenulata</i> (Btlr.)	x	x	7 Jun - 13 Aug
10587	<i>Orthodes cynica</i> Gn.	x	x	8 May - 11 Jun
10648	<i>Agrotis gladaria</i> Morr.	x	x	30 Sep - 6 Oct
10651	<i>Agrotis venerabilis</i> Wlk.	x	—	4 Oct
10663	<i>Agrotis ipsilon</i> (Hufn.)	x	x	23 Apr, 3 Jun, 13 Aug
10664	<i>Feltia subterranea</i> (F.)	x	—	5 Sep
10670	<i>Feltia jaculifera</i> (Gn.)	x	—	4 Oct
10674	<i>Feltia subgothica</i> (Haw.)	x	—	4 Oct
10676	<i>Feltia herilis</i> (Grt.)	x	—	4 Oct
10810	<i>Euxoa violaris</i> (Grt. & Rob.)	x	—	4 Oct
10870	<i>Dichagyris acclivis</i> (Morr.)	x	—	19 Aug
10891	<i>Ochropleura implecta</i> Laf.	x	—	14 Aug
10903	<i>Anicla illapsa</i> (Wlk.)	x	—	29 Jul
10911	<i>Anicla infecta</i> (Ochs)	—	x	24 Aug - 30 Sep
10915	<i>Peridroma saucia</i> (Hbn.)	x	x	8 May, 13 Aug, 6 Oct
10925.1	<i>Noctua pronuba</i> L.	x	x	15 Jun, 13 Aug
10942.1	<i>Xestia dolosa</i> Franc.	x	x	8 May - 6 Oct
10944	<i>Xestia smithii</i> (Snell)	x	—	5 Sep
10955	<i>Agnorisma badinodis</i> (Grt.)	x	x	4 - 6 Oct
10956	<i>Agnorisma bollii</i> (Grt.)	—	x	6 Oct
10969	<i>Xestia dilucida</i> (Morr.)	x	—	8 Oct
10994	<i>Cerastis tenebrifera</i> (Wlk.)	x	x	16 Jan, 14 Mar - 23 Apr
10998	<i>Choephora fungorum</i> Grt. & Rob.	x	x	6 - 19 Oct
11029	<i>Abagrotis alternata</i> (Grt.)	x	x	3 Jun - 6 Oct
11068	<i>Heliocoverpa zea</i> (Boddie)	x	x	13 Aug - 6 Oct
11071	<i>Heliothis virescens</i> (F.)	—	x	4 Oct
11117	<i>Schinia lynx</i> (Gn.)	x	—	19 Aug
11128	<i>Schinia arcigera</i> (Gn.)	x	—	19 Aug